

4.4 CCD

4.4.1 BACKGROUND

The charge-coupling device (CCD) detector used by ISS is a 1024 x 1024 picture element (pixel) array which has on-chip summation capabilities of 1x1, 2x2 and 4x4 pixel summations. Pixel size is 12 μm x 12 μm . The CCD chip was manufactured by Loral, which was subsequently packaged by JPL (see Figure 4.4.1-1). The packaged CCDs have a lumogen coating to enhance UV response. ISS operating temperatures for the NAC and WAC FM CCDs will be regulated at - 90 °C.

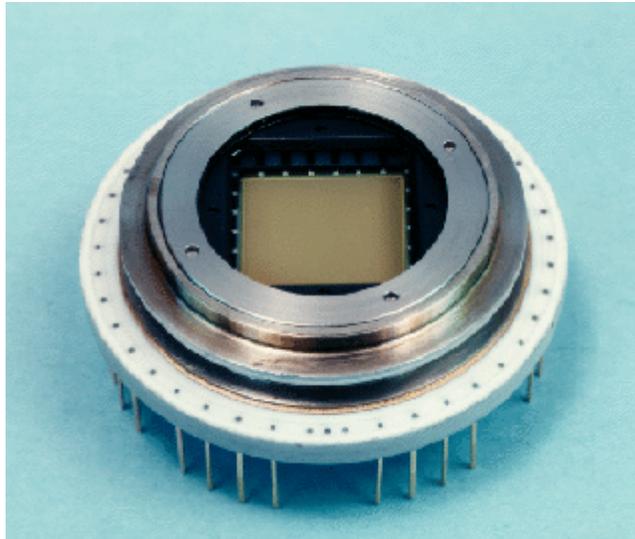


Figure 4.4.1-1 - Packaged CCD